

Date: Tuesday, 4/18/2006 10:06:47 AM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: DOUBLER		
Job Number	: 26688		Part Number	: D33023		
Estimate Number	: 11318		Drawing Number	: D3302 REV B2		
P.O. Number	: N/A		Project Number	: N/A		
This Issue	: 4/18/2006 S.O. No. : N/A		Drawing Revision	: B2		
Prsht Rev.	: NC		Material	: N/A		
First Issue	: N/A		Due Date	: 5/5/2006		
Previous Run	: N/A		Qty:	10	Um:	Each
Written By	: <u>SEE J. A (Comment Below)</u>					
Checked & Approved By	: <u>KJ 06-04-18</u>					
Comment	: Est A 04.09.02 New issue KJ/JLM					

Additional Product

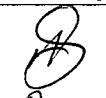
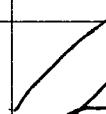
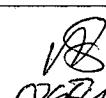
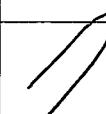
Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	M6061T6S063	6061-T6 .063 Sheet
		 Comment: Qty.: 1.0428 sf(s)/Unit Total : 10.4276 sf(s) 6061-T6 .063 Sheet Material: 6061-T6 (QQ-A-250/11) 0.063" thick (M6061T6S.063) Identify for D3302-3 Batch: <u>M18556</u>
2.0	SHEAR	SHEAR
		 Comment: SHEAR Cut blank: 14.550" x 9.100"
3.0	HAAS <u>Water Jet</u>	HAAS CNC VERTICAL MACHINING #1
		 Comment: HAAS CNC VERTICAL MACHINING #1 <u>Machine as per Folio FA450 and Dwg D3302</u> <u>Stack of 10</u> <u>Identify as D3302-3</u> <u>Cut</u> <u>Prog. Rev. B2</u> <u>Dwg Rev. B1</u> <u>M18550.02</u>
4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
		 Comment: INSPECT PARTS AS THEY COME OFF MACHINE <u>QC/MI 06.05.02</u>
5.0	QC8	SECOND CHECK
		 Comment: SECOND CHECK <u>J. 06.05.03</u>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes DQA:  Date: 06/05/08
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06/05/08	5.0	4 parts missing from water set to Inspection RACK. No split had been made.	 06/05/08	Qty 6 remaining on w/o. Part in water set SERIAL # Other 4 are untraceable b/c P# in prod.	 06/05/08	 06/05/08	 06/05/08	

NOTE: Date & initial all entries

Date: Tuesday, 4/18/2006 10:06:48 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DOUBLER

Job Number: 26688

Part Number: D33023

Job Number:



Seq. #: Machine Or Operation:

Description :

6.0 SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Deburr break all unmarked sharp edges 0.005 to 0.010

MF

06-05-08

(6)

7.0 BRAKE NC

NC BRAKE



Comment: NC BRAKE

Form as per Dwg D3302

SB

06/05/11

(6)

8.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

9.0 HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

SAD 06/05/12

(6)

10.0 QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

11.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 5036

14/05/16 (6)

12.0 DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

12 06/05/17 (6)

Job Completion



12 06/05/17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	26688
Description:	Doubler	Part Number:	D3302-3
Inspection Dwg:	D3302	Rev:	B2

Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

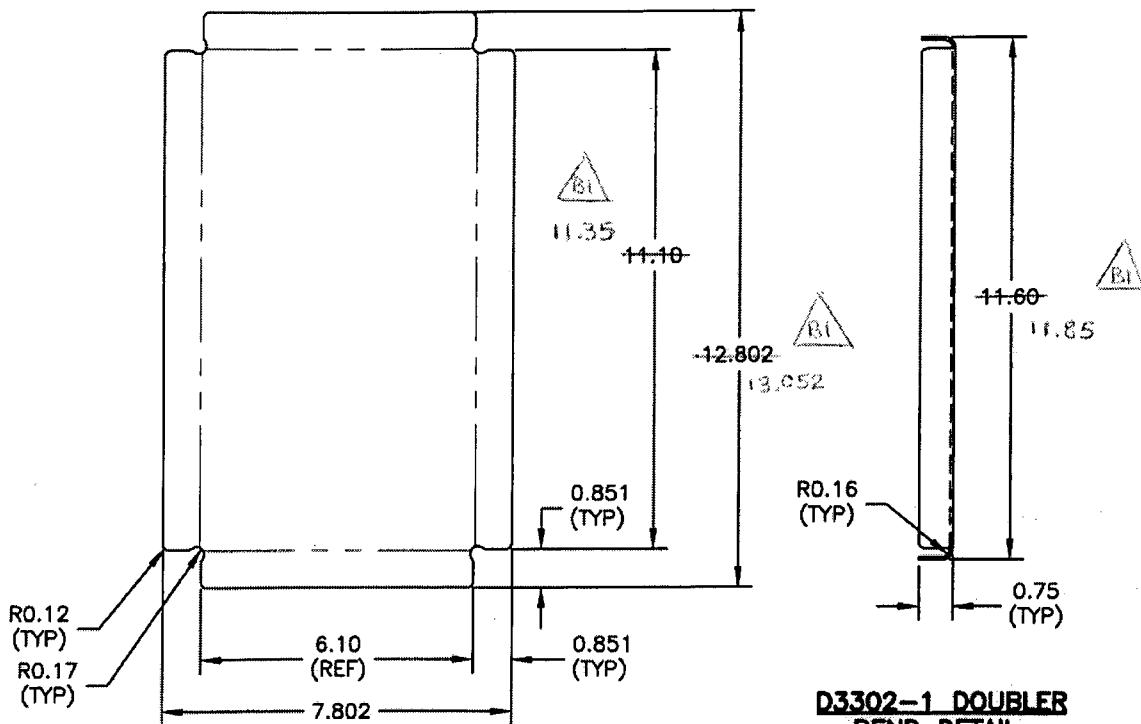
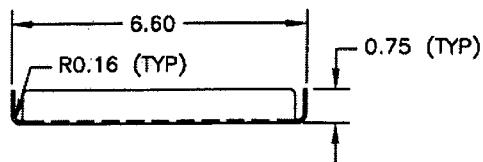
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
14.452	+/-0.010					
12.50	+/-0.030					
0.851	+/-0.010					
0.851	+/-0.010					
8.997	+/-0.010					
7.30	+/-0.030					
5.000	+/-0.005					
1.000 pitch	+/-0.005					
R0.12	+/-0.030					
1.031	+/-0.010					
2.021	+/-0.010					
1.101	+/-0.010					
11.250	+/-0.005					
1.125 pitch	+/-0.005					
1.476	+/-0.010					
7.101	+/-0.010					
0.068	+/-0.010					
Ø0.098	+0.005/-0.000					
12.750	± 0.03	12.752	✓		height gauge	
14.452	± 0.01	14.455	✓		"	
7.25	± 0.03	7.256	✓		"	
8.952	± 0.01	8.960	✓		"	
R.170	± 0.03	R.170	✓		"	

Measured by:	<i>KJ/JLM</i>	Audited by:	<i>KJ/JLM</i>	Prototype Approval:	N/A
Date:	<i>06.05.02</i>	Date:	<i>06.05.03</i>	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.09.03	New Issue	KJ/JLM	
B	06.03.09	Dwg Rev update; Dimensions revised to revision B2	KJ/JLM <i>KJ/JLM</i>	<i>JLM</i>

DART

DESIGN <i>RF</i>	DRAWN BY <i>RF</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3302	REV. B SHEET 1 OF 4
DATE 04.11.18		TITLE DOUBLER	SCALE 1:4
A	04.07.06	NEW ISSUE	
B	04.11.18	REMOVE HOLES	
B1	RF 04.12.15	ADDED 0.25" TO THE LENGTH OF FOR -1/3	
B2	RF 05.03.21	7.25 WAS 7.34; 8.952 WAS 9.042; 7.75 WAS 7.84 FOR D3302-3	

RELEASED
04.11.23**D3302-1 FLAT PATTERN****D3302-1 NOTES:**

- 1) MATERIAL: 6061-T6 (QQ-A-250/11) 0.063 THICK (REF. DART SPEC. M6061T6S063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) IDENTIFY WITH DART P/N & B/N USING FINE POINT PERMANENT MARKER

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RETURN TO

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UNCONTROLLED COPY

SUBJECT TO AMENDMENT

WITHOUT NOTICE

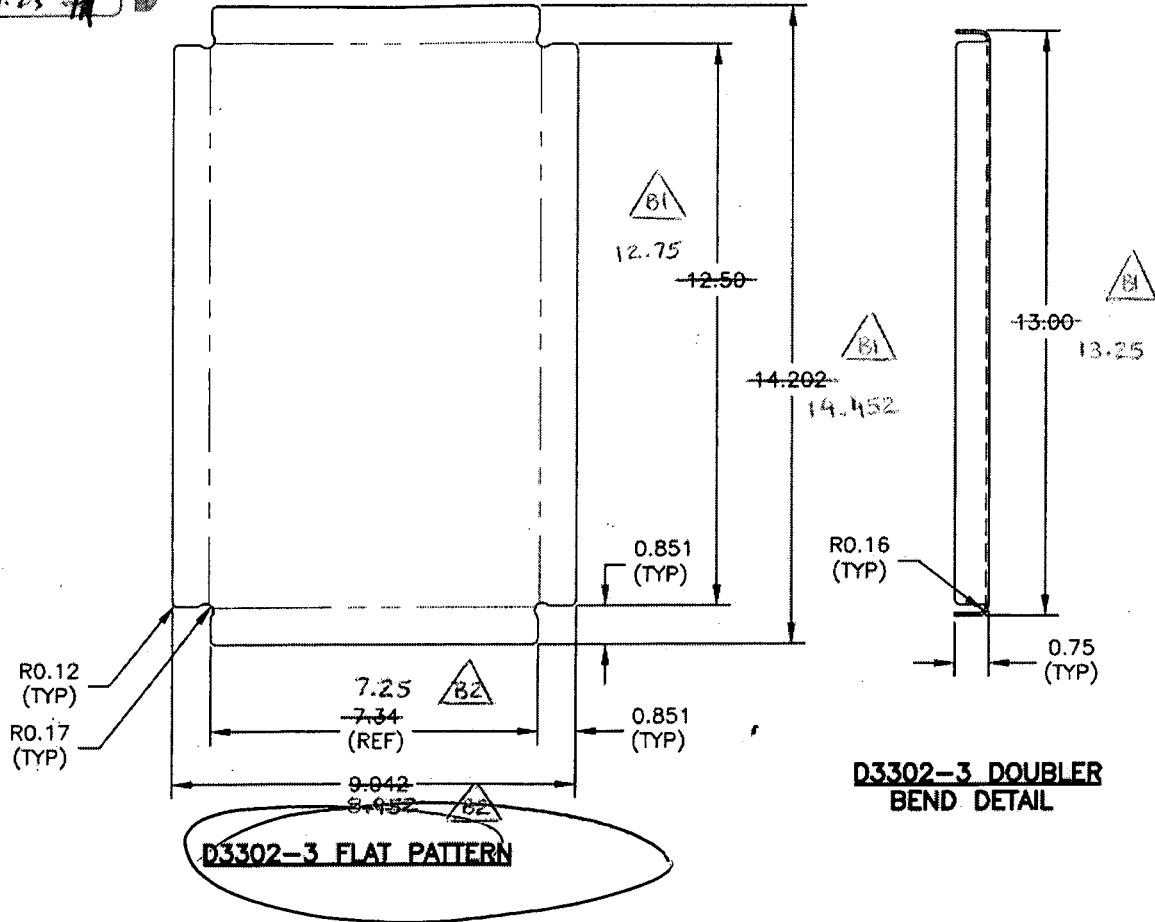
WORK ORDER

NO. 26688

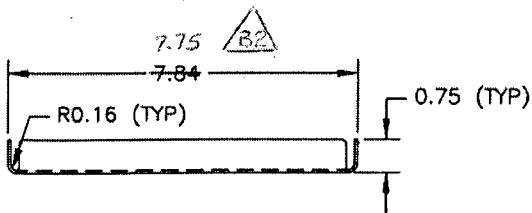
DART

DESIGN <i>RT</i>	DRAWN BY <i>RT</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>RT</i>	APPROVED <i>RT</i>	DRAWING NO. D3302	REV. B SHEET 2 OF 4
DATE 04.11.18		TITLE DOUBLER	SCALE 1:4

RELEASED
04.11.23 *RT*



D3302-3 FLAT PATTERN



D3302-3 NOTES:

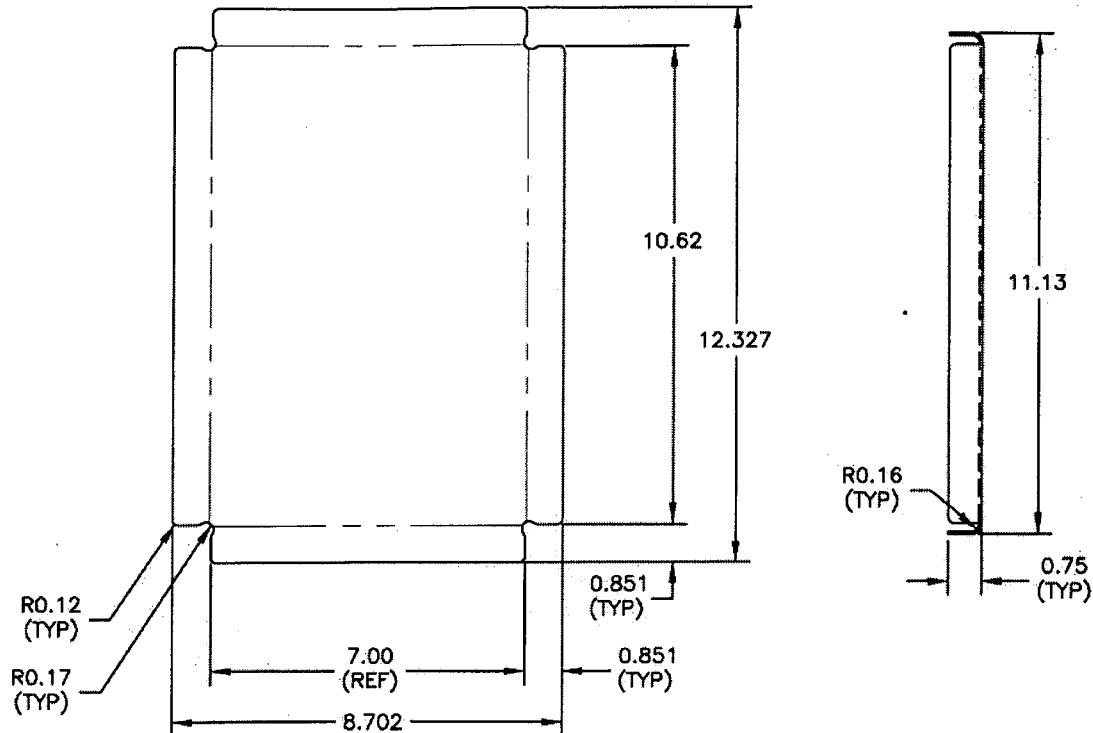
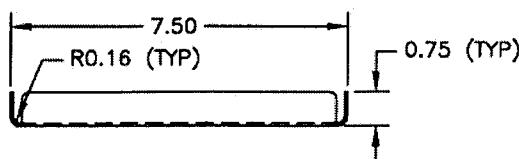
- 1) MATERIAL: 6061-T6 (QQ-A-250/11) 0.063 THICK (REF. DART SPEC. M6061T6S063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) IDENTIFY WITH DART P/N & BATCH USING FINE POINT PERMANENT MARKER

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DART

DESIGN <i>RF</i>	DRAWN BY <i>RF</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>RF</i>	APPROVED <i>RF</i>	DRAWING NO. D3302	REV. B SHEET 3 OF 4
DATE 04.11.08		TITLE DOUBLER	SCALE 1:4

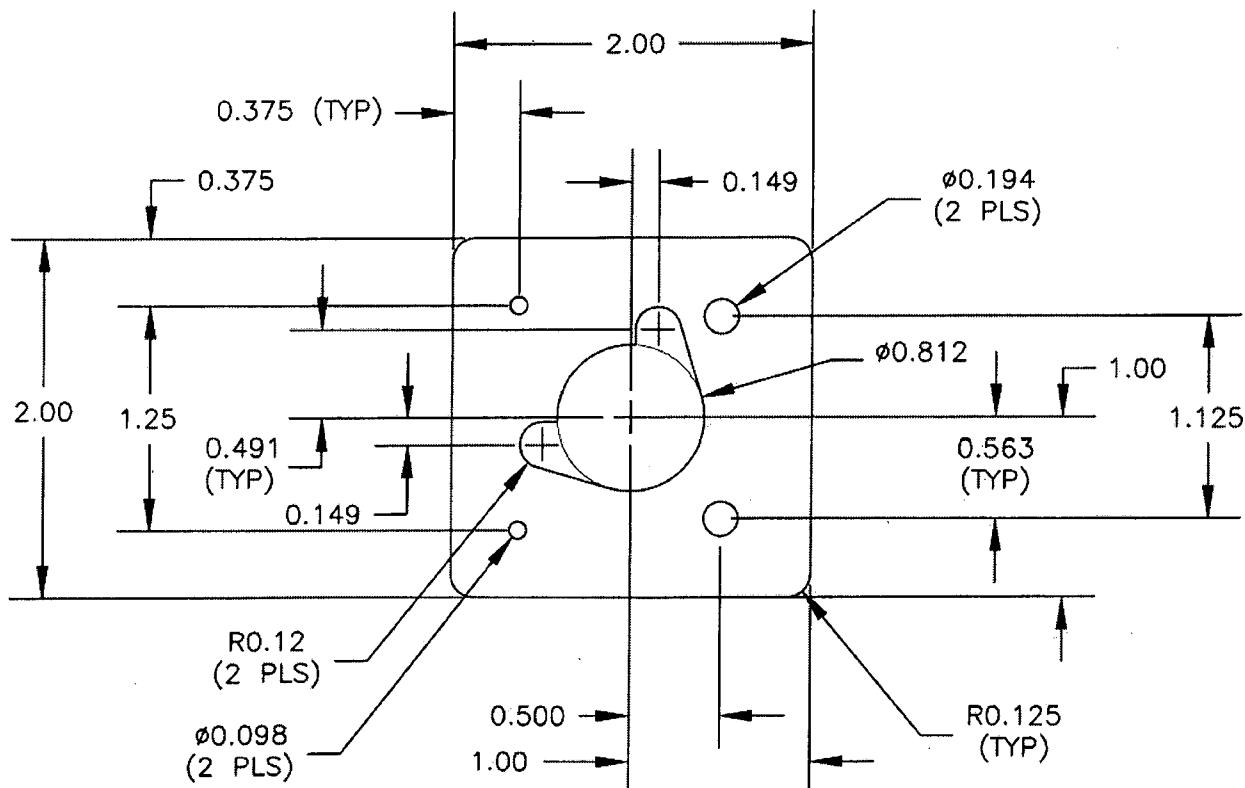
RELEASED
04.11.23 *RF***D3302-5 FLAT PATTERN****D3302-5 DOUBLER
BEND DETAIL****D3302-5 NOTES:**

- 1) MATERIAL: 6061-T6 (QQ-A-250/11) 0.063 THICK (REF. DART SPEC. M6061T6S.063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) IDENTIFY WITH DART P/N & B/N USING FINE POINT PERMANENT MARKER

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DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED ✓	APPROVED ✓	DRAWING NO. D3302	REV. B SHEET 4 OF 4
DATE 04.11.18		TITLE DOUBLER	SCALE 1:1

RELEASED
04.11.23 ~~✓~~**D3302-7****D3302-7 NOTES:**

- 1) MATERIAL: 5052-H32 OR 6061-T6 (QQ-A-250/8 OR QQ-A-250/11) **UNCONTROLLED COPY**
0.040 THICK (REF. DART SPEC. M5052H32S.040) **SUBJECT TO AMENDMENT**
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) IDENTIFY WITH DART P/N & B/N USING FINE POINT PERMANENT MARKER

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